In this lecture, we will investigate how using use cases to generate test cases can help launch the testing process early in the development lifecycle and also help with testing methodology.

Use cases are the core requirements artifact in the Rational Unified Process (RUP). They are typically consistent throughout the software development process. Uses cases capture the systems functionality from the client’s point of view.

Testing throughout the Software Lifecycle

- Heumann’s method uses all the possible flows through a use case to generate a set of test data.
- A matrix is developed mapping each scenario to a sequence of input data, and a description of the expected behaviour.

Exercises:
- Read the brief description of the Heumann method
- Apply it to the Buy Goods use case
- What are the strengths and weaknesses of this method compared with the lower level tests we’ve examined?